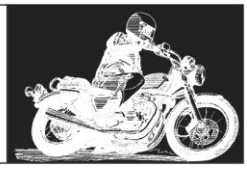
# Joint Select Committee on Road Safety

August 2021

MOTORCYCLE COUNCIL
OF NEW SOUTH WALES
INCORPORATED



Established 1981

Submission to the Joint Select Committee on Road Safety

# About the MCC of NSW

The Motorcycle Council of NSW Inc. (MCC) is an internationally recognised umbrella group for motorcycle clubs, associations and ride groups, in the state of New South Wales.

Established in 1981, the MCC is recognised as the peak motorcycle representative body in NSW and Subject Matter Experts on many complex issues dealing with motorcycling including crash data and statistics, traffic data and congestion information.

The MCC has published documentation that has been referenced worldwide by overseas motorcycling and traffic bodies and has produced video training films that have been utilised and referred to by many overseas trainers, researchers and ride associations.

MCC is the peak representative body for motorcycling in the state of NSW representing over 60 motorcycle clubs, which have a total membership of over 41,000 motorcyclists.

We wish to thank the Joint Select Committee on Road safety for the opportunity to present this submission.

Should you require further information on the information contained within this submission please feel free to contact the MCC.

Brian Wood

Secretary

In response to the Terms of Reference, the Motorcycle Council of NSW (MCC) wishes to make the following comments:-

***(a) measures to support the Australian Parliament's ongoing resolve to eliminate road crash fatal and serious injuries with a focus on ways to achieving Vision Zero by 2050;***

1/ Attached is a graph produced by Transport for NSW which shows how fatalities will decrease over the coming years until 2056 if all critical measures are adopted to achieve Towards Zero (Figure 1). The graph however shows a residual of 10 to 20% in 2056. It was explained during a presentation that this residual will be mainly motorcycle fatalities. The safety of motorcyclists is just as important as the safety of other road users groups and every effort needs to be made to ensure there is no residual attributed to motorcyclists.

2/ During the consultation process for the development of the National Road Safety Strategy (NRSS) there was a comment that there are few levers available to improve motorcycle safety. If there are currently only a few levers available this is the result of insufficient resources and funding being made available to develop countermeasures to address motorcycle trauma.

A Motorcycle and Scooter Safety Summit was held in 2008 and a report 'The Road Ahead' prepare with recommendations. Many of these recommendations are yet to be implemented. Funding urgently needs to be made available to develop and implement these recommendations.

3/ In the NRSS motorcyclists are classified as a vulnerable road user together with pedal cyclists and pedestrians, yet there is little synergy in the countermeasures adopted to address these other road user groups and those needed for motorcyclists.

***(b) the effectiveness of existing road safety programs across Australia; opportunities to improve them and encourage broader take-up of effective approaches***

1/ It has been claimed that motorcycle ABS will reduce motorcycle fatalities by 33% yet there is no evidence that this is the case. Attached are calculations based on those used in the Regulation Impact Statement to justify the mandating of motorcycle ABS. This regulation became effective as of 1st November, 2019 when all new models sold after that date with a capacity greater than 125cc had to be equipped this ABS and those between 50cc and 125cc had to be equipped with either ABS or CBS, and as of 1st November, 2021 all new motorcycles sold had to be equipped with ABS if over 125cc or with ABS or CBS if between 50cc and 125cc.

Even without mandating around 40% of new motorcycles sold in 2017 were equipped with ABS. ABS equipped bikes started to be sold in numbers in about 2010. Therefore, a reduction in motorcycle fatalities would have commenced at that time. Using the data and calculations used in the Regulation Impact Statement, Advanced Motorcycle Braking Systems for Safer Riding dated April, 2017, an estimated one life would have been saved in 2011 and 49 lives being saved in 2020 (Figure 8).

During the consultation period regarding the mandating of ABS the Motorcycle Council of NSW (MCC) proposed that education programs would be required to inform riders on how to use, and what feedback the motorcycle rider will experience when ABS is engaged which, requires maintaining full brake lever pressure for maximum effect, experienced motorcycle riders report releasing the brake lever is a natural intuitive reaction when ABS engages. The MCC's proposal was dismissed out of hand. If it cannot be demonstrated that mandatory ABS is achieving the claimed benefits, the proposal to introduce educational programs must be commenced.

2/ There has been a significant increase in the number of motorcycle registration in the past 20 years (Figure 2) from 342,365 in 2000 to 880, 881 in 2020, yet there has not been a corresponding significant increase in the number of motorcycle fatalities. This indicates that either current countermeasures have been very effective or the number of registrations is not a good measure of comparing crash rates.

As many motorcycles are used for recreational purposes, the significant increase in registrations may not be resulting in an equivalent increase in kilometres travelled. In NSW odometer readings are taken as part

of the annual Safety Check for registration. This data should be examined so a crash rate per 10,000 kilometres travelled can be determined.

***(c) opportunities for government policy in health, education, industry, transport and other areas to contribute to road trauma elimination, integrating Safe System principles***

1/ Bottom rub-rails on W-Beam barriers are being installed throughout Australia as a means of reducing motorcycle trauma. However, research has shown that in 50% of motorcycle impacts with barriers the rider is still upright on the motorcycle when injury is likely to be caused by the tops of the posts. Installing bottom rub-rails only does half the job.

Designing and installing of a top rub-rail should be given a high priority for reducing motorcycle trauma. Designing a top rub-rail is more problematic as the rub-rail in many cases has to be curved in the horizontal plane to follow the curvature of the W-Beam barrier. For the bottom rub-rail the curvature is in the vertical plane which is relatively easy to achieve but there are roll forming processes that can used to achieve a curvature in the horizontal plane.

There is only one known design of a top rub-rail that has been crash tested with one known installation. This design uses perforated sheet with bolted connections to achieve the required horizontal curvature.

2/ the MotoCAP program for the testing of protective clothing needs additional funding to increase the number of garments tested each year.

The program must be expanded to include motorcycle boots as one of the essential safety items for all motorcyclists. There is evidence that foot and lower leg injuries can be prevented if motorcycle riders are wearing appropriate footwear. It has taken 20 years to develop MotoCAP from a concept to a program that is benefitting motorcycle riders. Adequate funding is necessary so it doesn't take another 20 years to develop and implement a 5 Star rating scheme for motorcycle footwear.

3/ The International Road Assessment Program (iRAP) has the ability to rate roads for motorcycle safety. AusRAP must be further developed to rate Australian roads for their motorcycle safety. Funding is required to bring roads with a high motorcycle crash rate up to a 5 Star Motorcycle rating.

***(d) opportunities to embed road trauma prevention across Australian Government portfolios and agencies; and***

1/ The Motorcycle Safety Consultative Committee (MSCC) needs to be re-established so that motorcycle rider organisations have the ability to assist government policy makers through consultation and the use of expertise motorcycle rider organisations can provide.

2/ The majority of helmets sold and worn in Australian comply with the UN ECE Regulation 22.05 yet Australian has no representation on the working group that maintains this regulation. As a result, UN ECE 22.06 was developed without input from Australia. This new Regulation was adopted in January 2021 and 22.06 helmets are currently being sold in Europe, yet they can only be legally sold and worn in Victoria.

There are several issues with 22.06 that should have been addressed before it was adopted, in particular, the requirements for accessories, these accessories include cameras and communications devices. Approval for these accessories is left to the helmet manufacturer to approve with no guidance as to what is safe. Approval of accessories could be purely on a commercial basis with no regard to safety.

While there are requirements for the testing of the chin bar, there is some concern that the requirements are not adequate to prevent injury.

The Department of Infrastructure, Transport, Regional Development and Communications is obligated to obtain representation on the UN ECE Working Group so these issues can be addressed.

**(e) opportunities to reduce road trauma in the workplace, working with Work Health and Safety agencies and employers across Australia; including a focus on heavy vehicles and the gig economy.**

There are several issues the MCC wishes to raise in regards to the safety of delivery riders:-

1/ Licences

In some jurisdictions international students on student visas are permitted to ride on the licence of their country of origin indefinitely, whereas those who are permanent residents from overseas have to convert to a local rider's licence. Some international students on student visas could be riding on their country of origin licence for several years and may not have undertaken an appropriate rider training either in their country of origin or in Australia

It is the MCC's view that all riders should undergo appropriate novice rider training and testing as soon as practicable before being able to ride in Australia.

2/ Specific Training for Delivery Riders

It is the MCC's position that rider training should be a whole of life experience where riders undertake training throughout their riding career - not just at the learner stage. https://mccofnsw.org.au/rider-training-position-statement

It is also the MCC's view that to improve motorcycle safety, riders need to be trained to become good risk managers. To do this, riders need to be provided with information on the particular risks they face, and with strategies to address these risks.

Delivery riders face particular risks, such as:-

- the safe use satellite navigation systems while riding
- the safe use of booking systems while riding
- riding in congested traffic
- lane filtering, particularly around buses and trucks
- riding in blind spots
- safe manoeuvring in and out of parking spots

While delivery riders are considered to be contractors, it is the MCC's view that those engaging them as delivery riders still have a responsibility similar to that if they were employees, to ensure they have the appropriate skills and training to undertake the tasks assigned to them.

Therefore, delivery riders need to have undertaken appropriate rider training and testing to have obtained a licence and then provided with information and strategies to address the particular risks they will face as delivery riders.

Both information and strategies could be provided at regular intervals during their career as a delivery rider in the form of online training and testing modules.

**Summary**

1/ Motorcyclists should be treated as a separate road user group with specific countermeasures developed and implemented to address their unique road safety needs.

2/ If it cannot be demonstrated that the claimed benefits for mandated motorcycle ABS are being achieved, essential training programs must be implemented to educate motorcycle riders on how the correct use of ABS is required to achieve maximum benefit. ABS is only of benefit if the motorcycle rider is confident and trained to apply the brakes to the point where the wheels would lock had ABS not been fitted.

3/ Crash rates per 10,000 kilometres travelled must be made available.

4/ Resources must be allocated for the development and crash testing of a top rub-rail to be retro fitted to W-Beam barriers.

5/ It is essential that funding be provided so MotoCAP can increase the level of testing and to develop and implement a rating scheme for motorcycle footwear.

6/ AusRAP needs to be refined to rate roads for motorcycle safety

7/ A prerequisite exists for Australia to have representation on the UN ECE Working Group for motorcycle helmets.

8/ Training programs for food delivery motorcycle riders is essential and needs to be introduced.

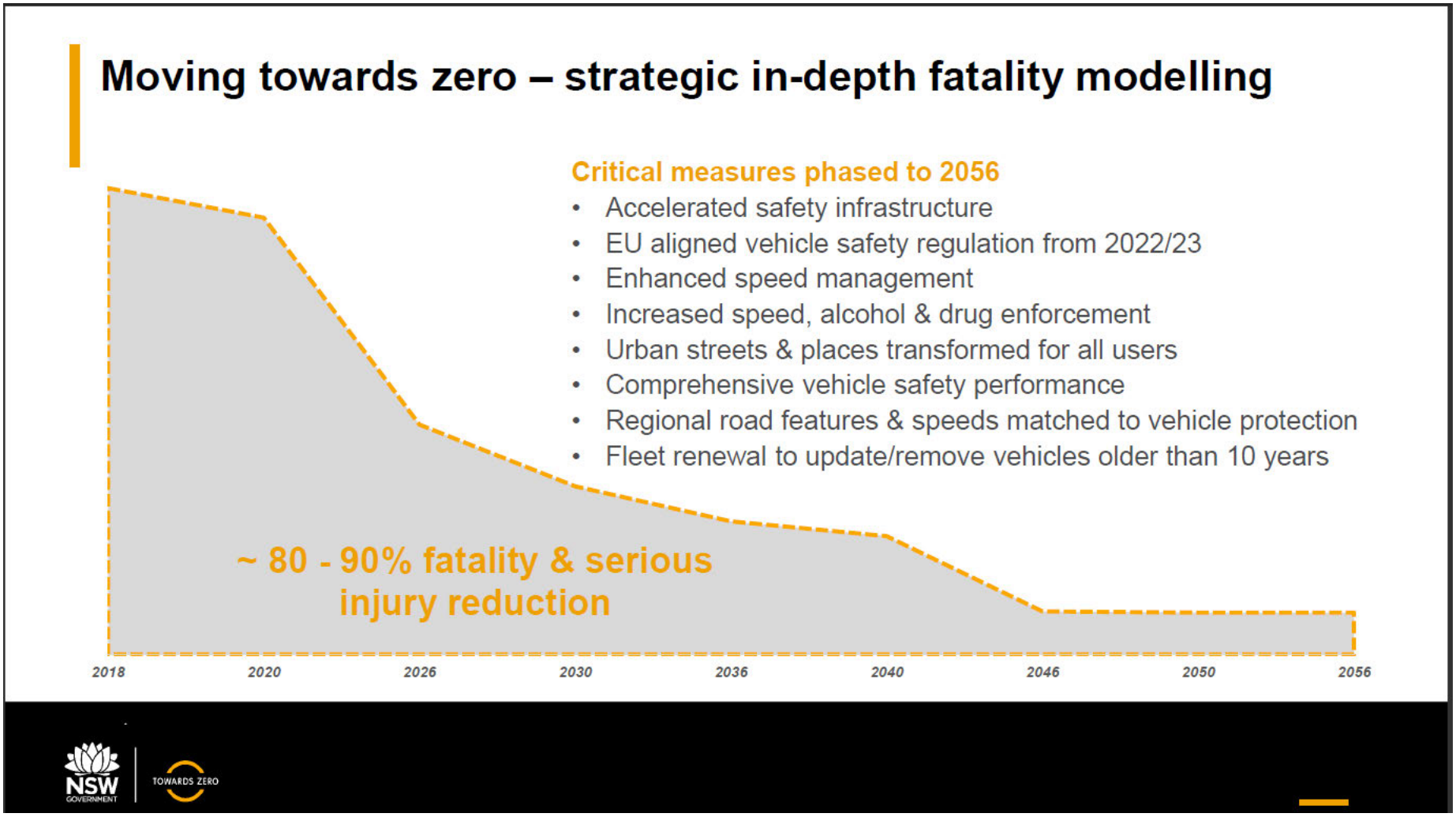

Moving towards zero – strategic in-depth fatality modelling
Critical measures phased to 2056
• Accelerated safety infrastructure
• EU aligned vehicle safety regulation from 2022/23
• Enhanced speed management
• Increased speed, alcohol & drug enforcement
• Urban streets & places transformed for all users
• Comprehensive vehicle safety performance
• Regional road features & speeds matched to vehicle protection
• Fleet renewal to update/remove vehicles older than 10 years
~ 80 - 90% fatality & serious injury reduction
2018
2020
2026
2030
2036
2040
2046
2050
2056
NSW GOVERNMENT
TOWARDS ZERO

Figure 1

**Table 1** Motorcycles Sold

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | 41968 | | | | | | | | | | |
| 2011 | 42628 | 41968 | | | | | | | | | |
| 2012 | 48613 | 42628 | 41968 | | | | | | | | |
| 2013 | 48883 | 48613 | 42628 | 41968 | | | | | | | |
| 2014 | 49630 | 48883 | 48613 | 42628 | 41968 | | | | | | |
| 2015 | 52112 | 49630 | 48883 | 48613 | 42628 | 41968 | | | | | |
| 2016 | 54717 | 52112 | 49630 | 48883 | 48613 | 42628 | 41968 | | | | |
| 2017 | 57453 | 54717 | 52112 | 49630 | 48883 | 48613 | 42628 | 41968 | | | |
| 2018 | 60326 | 57453 | 54717 | 52112 | 49630 | 48883 | 48613 | 42628 | 41968 | | |
| 2019 | 63342 | 60326 | 57453 | 54717 | 52112 | 49630 | 48883 | 48613 | 42628 | 41968 | |
| 2020 | 66509 | 63342 | 60326 | 57453 | 54717 | 52112 | 49630 | 48883 | 48613 | 42628 | 41968 |

**Table 2** ABS Fitment Rate

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | 0.09 | | | | | | | | | | |
| 2011 | 0.11 | 0.09 | | | | | | | | | |
| 2012 | 0.2 | 0.11 | 0.09 | | | | | | | | |
| 2013 | 0.36 | 0.2 | 0.11 | 0.09 | | | | | | | |
| 2014 | 0.27 | 0.36 | 0.2 | 0.11 | 0.09 | | | | | | |
| 2015 | 0.33 | 0.27 | 0.36 | 0.2 | 0.11 | 0.09 | | | | | |
| 2016 | 0.41 | 0.33 | 0.27 | 0.36 | 0.2 | 0.11 | 0.09 | | | | |
| 2017 | 0.51 | 0.41 | 0.33 | 0.27 | 0.36 | 0.2 | 0.11 | 0.09 | | | |
| 2018 | 0.75 | 0.51 | 0.41 | 0.33 | 0.27 | 0.36 | 0.2 | 0.11 | 0.09 | | |
| 2019 | 0.999 | 0.75 | 0.51 | 0.41 | 0.33 | 0.27 | 0.36 | 0.2 | 0.11 | 0.09 | |
| 2020 | 0.999 | 0.999 | 0.75 | 0.51 | 0.41 | 0.33 | 0.27 | 0.36 | 0.2 | 0.11 | 0.09 |

**Table 3** Number of Bikes sold fitted with ABS

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | 3777 | | | | | | | | | | |
| 2011 | 4689 | 3777 | | | | | | | | | |
| 2012 | 9723 | 4689 | 3777 | | | | | | | | |
| 2013 | 17598 | 9723 | 4689 | 3777 | | | | | | | |
| 2014 | 13400 | 17598 | 9723 | 4689 | 3777 | | | | | | |
| 2015 | 17197 | 13400 | 17598 | 9723 | 4689 | 3777 | | | | | |
| 2016 | 22434 | 17197 | 13400 | 17598 | 9723 | 4689 | 3777 | | | | |
| 2017 | 29301 | 22434 | 17197 | 13400 | 17598 | 9723 | 4689 | 3777 | | | |
| 2018 | 45245 | 29301 | 22434 | 17197 | 13400 | 17598 | 9723 | 4689 | 3777 | | |
| 2019 | 63279 | 45245 | 29301 | 22434 | 17197 | 13400 | 17598 | 9723 | 4689 | 3777 | |
| 2020 | 66442 | 63279 | 45245 | 29301 | 22434 | 17197 | 13400 | 17598 | 9723 | 4689 | 3777 |

**Table 4** Crash rate by Age

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | 0.008477 | | | | | | | | | | |
| 2011 | 0.008477 | 0.019997 | | | | | | | | | |
| 2012 | 0.008477 | 0.019997 | 0.021404 | | | | | | | | |
| 2013 | 0.008477 | 0.019997 | 0.021404 | 0.021654 | | | | | | | |
| 2014 | 0.008477 | 0.019997 | 0.021404 | 0.021654 | 0.032301 | | | | | | |
| 2015 | 0.008477 | 0.019997 | 0.021404 | 0.021654 | 0.032301 | 0.014353 | | | | | |
| 2016 | 0.008477 | 0.019997 | 0.021404 | 0.021654 | 0.032301 | 0.014353 | 0.008291 | | | | |
| 2017 | 0.008477 | 0.019997 | 0.021404 | 0.021654 | 0.032301 | 0.014353 | 0.008291 | 0.006448 | | | |
| 2018 | 0.008477 | 0.019997 | 0.021404 | 0.021654 | 0.032301 | 0.014353 | 0.008291 | 0.006448 | 0.006017 | | |
| 2019 | 0.008477 | 0.019997 | 0.021404 | 0.021654 | 0.032301 | 0.014353 | 0.008291 | 0.006448 | 0.006017 | 0.005649 | |
| 2020 | 0.008477 | 0.019997 | 0.021404 | 0.021654 | 0.032301 | 0.014353 | 0.008291 | 0.006448 | 0.006017 | 0.005649 | 0.009403 |

**Table 5** Number of Casualty Crashes for ABS equipped Motorcycles

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Total Casualty Crashes ABS equiped Motorcycles |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | 32 | | | | | | | | | | | 32 |
| 2011 | 40 | 76 | | | | | | | | | | 115 |
| 2012 | 82 | 94 | 81 | | | | | | | | | 257 |
| 2013 | 149 | 194 | 100 | 82 | | | | | | | | 526 |
| 2014 | 114 | 352 | 208 | 102 | 122 | | | | | | | 897 |
| 2015 | 146 | 268 | 377 | 211 | 151 | 54 | | | | | | 1207 |
| 2016 | 190 | 344 | 287 | 381 | 314 | 67 | 31 | | | | | 1615 |
| 2017 | 248 | 449 | 368 | 290 | 568 | 140 | 39 | 24 | | | | 2126 |
| 2018 | 384 | 586 | 480 | 372 | 433 | 253 | 81 | 30 | 23 | | | 2641 |
| 2019 | 536 | 905 | 627 | 486 | 555 | 192 | 146 | 63 | 28 | 21 | | 3560 |
| 2020 | 563 | 1265 | 968 | 634 | 725 | 247 | 111 | 113 | 59 | 26 | 36 | 4748 |

**Table 6** Ratio of Fatal to Serious and Minor Casualty Crashes

| Fatal | Serious | Minor | Ratio |
|---|---|---|---|
| 1 | 14.53 | 16.57 | 32.1 |

**Table 7** Number of Fatal Crashes for ABS equipped Motorcycles (One fatal crash for every 32.1 casualty crashes)

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | 1 | | | | | | | | | | |
| 2011 | 1 | 2 | | | | | | | | | |
| 2012 | 3 | 3 | 3 | | | | | | | | |
| 2013 | 5 | 6 | 3 | 3 | | | | | | | |
| 2014 | 4 | 11 | 6 | 3 | 4 | | | | | | |
| 2015 | 5 | 8 | 12 | 7 | 5 | 2 | | | | | |
| 2016 | 6 | 11 | 9 | 12 | 10 | 2 | 1 | | | | |
| 2017 | 8 | 14 | 11 | 9 | 18 | 4 | 1 | 1 | | | |
| 2018 | 12 | 18 | 15 | 12 | 13 | 8 | 3 | 1 | 1 | | |
| 2019 | 17 | 28 | 20 | 15 | 17 | 6 | 5 | 2 | 1 | 1 | |
| 2020 | 18 | 39 | 30 | 20 | 23 | 8 | 3 | 4 | 2 | 1 | 1 |

**Table 8** Number of Fatal Crashes alleviated by ABS being effective in avoiding 33% of Fatal Crashes

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Total Fatal Crashes aleviated by ABS equiped Motorcycles |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | 0 | | | | | | | | | | | 0 |
| 2011 | 0 | 1 | | | | | | | | | | 1 |
| 2012 | 1 | 1 | 1 | | | | | | | | | 3 |
| 2013 | 2 | 2 | 1 | 1 | | | | | | | | 5 |
| 2014 | 1 | 4 | 2 | 1 | 1 | | | | | | | 9 |
| 2015 | 1 | 3 | 4 | 2 | 2 | 1 | | | | | | 12 |
| 2016 | 2 | 4 | 3 | 4 | 3 | 1 | 0 | | | | | 17 |
| 2017 | 3 | 5 | 4 | 3 | 6 | 1 | 0 | 0 | | | | 22 |
| 2018 | 4 | 6 | 5 | 4 | 4 | 3 | 1 | 0 | 0 | | | 27 |
| 2019 | 6 | 9 | 6 | 5 | 6 | 2 | 1 | 1 | 0 | 0 | | 37 |
| 2020 | 6 | 13 | 10 | 7 | 7 | 3 | 1 | 1 | 1 | 0 | 0 | 49 |

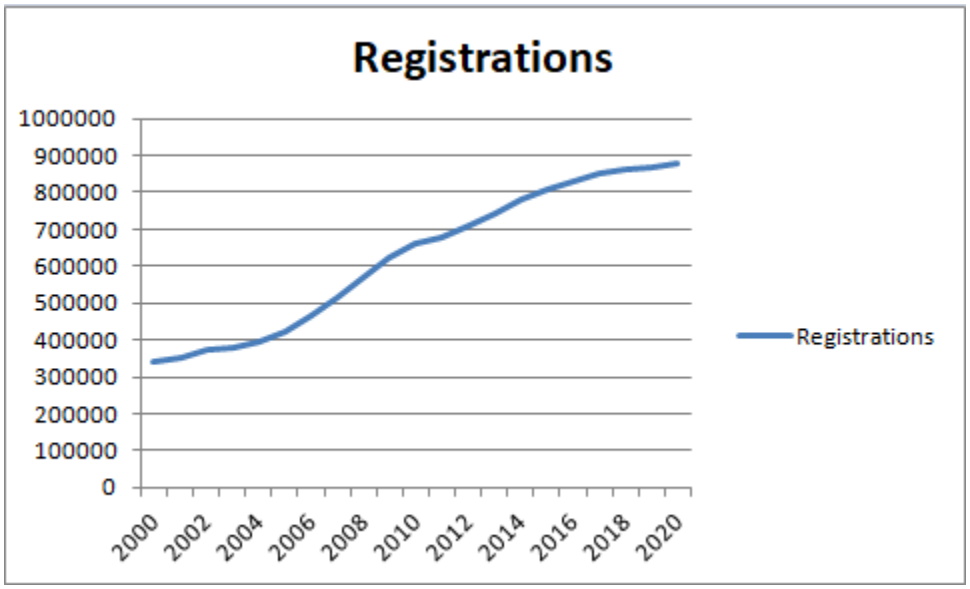



Figure 2

**End of Document**